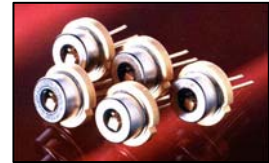




## RLT9820G

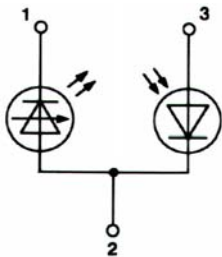
### TECHNICAL DATA



### High Power Infrared Laserdiode

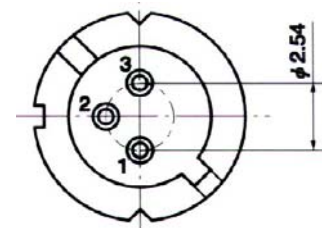
Structure: **GaAlAs double heterostructure**  
 Lasing wavelength: **980 nm typ.**  
 Max. optical power: **20 mW, multimode**  
 Package: **9 mm**

**NOTE!**  
**LASERDIODE**  
**MUST BE COOLED!**



#### PIN CONNECTION:

- 1) Laser diode cathode
- 2) Laser diode anode and photodiode cathode
- 3) Photodiode anode



#### Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	$P_o$	25	mW
LD Reverse Voltage	$V_{R(LD)}$	1.5	V
PD Reverse Voltage	$V_{R(PD)}$	6	V
Operating Temperature	$T_C$	-10 .. +50	°C
Storage Temperature	$T_{STG}$	-40 .. +85	°C

#### Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	$P_o$	cw		20		mW
Threshold Current	$I_{th}$	cw		25	30	mA
Operation Current	$I_{op}$	$P_o = 20 \text{ mW}$	60	75	100	mA
Lasing Aperture	A			1x15		$\mu\text{m}^2$
Lasing Wavelength	$\lambda_p$	$P_o = 20 \text{ mW}$	970	980	990	nm
Beam Divergence	$\theta_{//}$	$P_o = 20 \text{ mW}$		20	25	°
Beam Divergence	$\theta_{\perp}$	$P_o = 20 \text{ mW}$		45	50	°
Differential Efficiency	$dP_o/dI_{op}$	$P_o = 20 \text{ mW}$	0.4	0.7	1.0	mW/mA
Monitor Current	$I_m$	$P_o = 20 \text{ mW}$	150	350	1200	$\mu\text{A}$